

XX. SOME NEW AND INTERESTING
BATRACHIA AND LIZARDS FROM
INDIA, CEYLON AND BORNEO.

(Plate xv.)

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The species described or commented on in this paper are represented by specimens recently presented to the Indian Museum or collected by members of its staff.

BATRACHIA.

Fam. CAECILIIDAE.

Since Mr. Boulenger published his volume on the Reptiles and Batrachia in the *Fauna of British India* (1890) the discovery by Col. Alcock¹ of a species of *Herpele* from Assam has not only added a very interesting form to the fauna but has also greatly extended the known range of the genus, which had previously been recorded only from Africa and America. The only other addition as yet made to the Indian list in the group is a new variety of the widely distributed Oriental species *Ichthyophis glutinosus* (*I.g. var. tricolor*) described from Travancore by myself.² I have here to add, from the southern part of the Malabar Zone, a new species of the South Indian and African genus *Uraeotyphlus*.

Uraeotyphlus menoni, sp. nov.

Teeth moderate, both rows on the mandible well developed.

Head triangular, short, with the snout rounded; snout about as long as the distance between the eyes, by no means prominent.

Tentacle below and slightly in advance of the nostril.

Eyes distinct.

Body cylindrical, slender, with about 170 rings; circular folds narrowly interrupted in the midventral line on the fore part of the body, alternating with longer and shorter interruptions on the hind part.

¹ *Ann. Mag. Nat. Hist.* (7) XIV, p. 271, pl. vii (1904).

² *Rec. Ind. Mus.* III, p. 186 (1909).

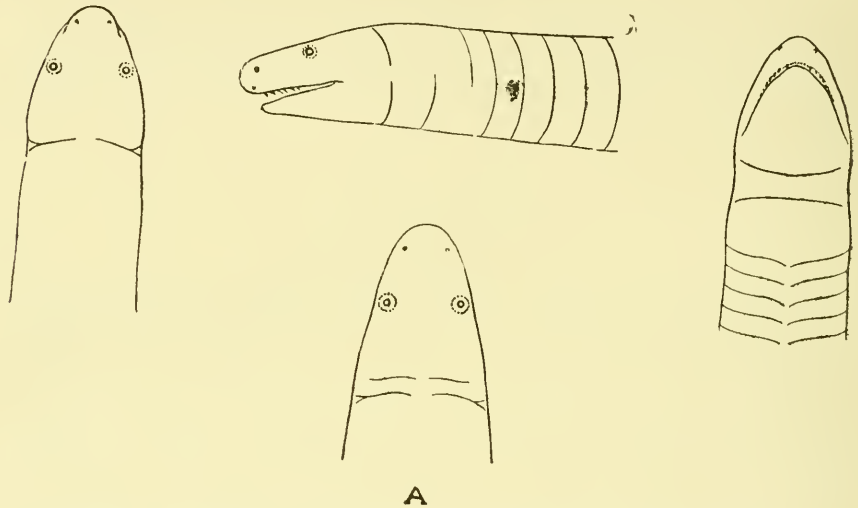
Tail short, pointed, bearing about 10 complete rings; its length 5-6 of its breadth at the base.

Colouration. Dorsal surface slate-grey; throat a little paler; lips narrowly pale; ventral surface of the body white blotched with slate grey, becoming darker posteriorly; the white extending for some distance up each fold on the side; tail uniform slate-grey; a pale spot round the vent.

Type No. 16707; *Co-type* No. 16695, *Rept. Ind. Mus.*

Distribution. Coastal districts of the southern part of the Malabar Zone.

I have examined two specimens, one (the type) from Trichur in Cochin, and the other from Kondatti in the S. Malabar district.



Head of *Uraeotyphlus menoni*, sp. nov., with that of *U. oxyurus* (A) for comparison.

Both were collected and presented to the Indian Museum by Prof. K. Rammuni Menon of Madras.

Uraeotyphlus menoni is closely related to *U. oxyurus*, from which it differs in its shorter head, in the less numerous rings on its body, in the more forward position of its nostril and in colouration.

***Uraeotyphlus oxyurus*, D. & B.**

Numerous specimens from Cochin have recently been presented to the Indian Museum by Prof. K. Rammuni Menon.

***Herpele fulleri*, Alcock.**

The type is numbered 14759 in our register of Reptiles and Batrachia. No further specimens have been obtained.

Fam. BUFONIDAE.

***Bufo stomaticus*, Lütken.**

Annandale, *Rec. Ind. Mus.* III, p. 283 (1909).

This toad has not hitherto been recorded from Peninsular India south of the Indus and the Ganges. A fine specimen was, however, recently obtained by Mr. F. H. Gravely and myself at Purulia in Chota Nagpur. It was found under a stone in the middle of a ploughed field.

The Arabian toad assigned by Mr. Boulenger to his *B. andersoni* (which is undoubtedly synonymous, so far as Indian specimens are concerned, with *B. stomaticus*) apparently differs from the Indian species in having a true as distinct from an artificial tarsal fold.

Fam. RANIDAE.

***Ixalus leucorhinus*, Martens.**

I. leucorhinus, Boulenger, *Faun. Ind., Rept.*, p. 483 (1890).

I. nasutus, Annandale (*nec* Günther), *Rec. Ind. Mus.* III, p. 286 (1909).

This species, which is recorded from both Ceylon and S. India, is easily confused with *I. nasutus*, which is apparently confined to Ceylon. The latter species may be distinguished by possessing a middorsal row of prominent whitish glands of very small size.

I. leucorhinus is not uncommon at the base of the Western Ghats in Travancore on the western side of the range. I have not seen specimens from Ceylon.

***Ixalus variabilis*, Günther.**

Colouration seems to have literally no specific significance in this frog. Six specimens were taken on one occasion by Mr. F. H. Gravely at Pattipola in the Central Province of Ceylon at an altitude of about 6000 ft. In one the whole of the dorsal surface is pale bluish grey with a bold irregular reticulation of black lines; in another it is of an almost uniform deep brown, except that the limbs are obscurely barred and that there is a very conspicuous white lozenge-shaped mark on the snout; a third has a distinct M-shaped dark mark on the back and a dark cross-bar between the eyes; while the colouration of the others is of a less striking character, but different in each case.

Besides Mr. Gravely's specimens we have others from Golconda, the Anamalai Hills and Tinneveli, all from Beddome's collection, as well as a large series from "S. India," "Malabar" and "Ceylon."

***Ixalus signatus*, Boulenger.**

A fine specimen of this species was recently taken at Coonoor in the Nilghiris (alt. *ca.* 6500 ft.) by Capt. R. B. Seymour Sewell, I.M.S. It is, therefore, not confined to the Malabar Zone.

***Ixalus cinerascens*, Stoliczka.**

(Plate xv, fig. 4.)

Ixalus cinerascens, Stoliczka, *Proc. As. Soc. Bengal* 1870, p. 273, and 1872, p. 109.
Leptobrachium monticola, Boulenger (*part.*), *Faun. Brit. Ind.*, p. 510 (1890).
Ixalus cinerascens, Slater, *Proc. Zool. Soc. London* 1892, p. 347.

This species, of which the type is in the Indian Museum, is, as Slater has pointed out, a true *Ixalus*. It was probably obtained in the first instance in the Dawna Hills inland from Moulmein. I took a specimen at an altitude of about 3000 ft. on the western side of that range in 1908.

There is no conical papilla on the tongue. A noteworthy feature is the prominence of the warts on the upper eyelid. The colouration is probably variable, my own specimen being much browner than Stoliczka's.

***Ixalus chalazodes*, Günther.**

Mr. T. Bainbrigg Fletcher recently presented to the Indian Museum a specimen he had taken in the Anamalai Hills at an altitude of 4000 ft. It agrees well with examples from Beddome's collection labelled simply "S. India."

***Ixalus glandulosus*, Jerdon.**

This is much the commonest species of the genus at moderate heights in the hills of Southern and South-western India. I have recently examined specimens from the following localities in the Western Ghats:—Satara, Kachal, Taloshi and Tambi (2000-2100 ft.) and Mahableshwar (4200 ft.) in the Satara district of the Bombay Presidency; also from Macara in Coorg and the Anamalai Hills (4000 ft.). These specimens were taken by Messrs. F. H. Gravely, S. P. Agharkar and T. Bainbrigg Fletcher.

***Ixalus annandalei*, Boulenger.**

Boulenger, *Journ. As. Soc. Bengal* 1906, (2), p. 385; Annandale, *Rec. Ind. Mus.* VIII, p. 16, pl. iii, fig. 2 (1912).

The tadpole of this species closely resembles that of *Rhacophorus maculatus himalayensis*,¹ together with which it is often abundant in pools of rain-water in the neighbourhood of Kurseong during the "rains." It may be distinguished by the following characters:—

1. The pigment is paler and more evenly disposed.
2. The tail is relatively shorter and much deeper at the base and tapers more abruptly at the tip. It has a broadly lanceolate form as a whole.
3. The upper profile of the head and body forms a more even curve.

¹ *Rec. Ind. Mus.* VIII, p. 24, pl. iv, fig. 5.

The young frog, immediately after its metamorphosis is complete, is already almost as large as the adult.

Ixalus semiruber, sp. nov.

(Plate xv, fig. 3.)

Size very small, the length from snout to vent being not more than 12 mm.

Habit stout; limbs moderate, tibio-tarsal articulation reaching a point midway between the eye and the tip of the snout.

Head. Snout bluntly rounded, about as long as diameter of orbit, with the nostril slightly nearer to its tip than to the eye; loreal region slightly concave; tympanum concealed; eyes large and prominent; dorsal surface of head slightly concave; inter-orbital space broader than upper eyelid. Tongue with a small free papilla; lower jaw with a tooth at the tip.

Skin of dorsal surface smooth, highly glandular but without prominent single glands; of throat and chest smooth, of belly and (to a less extent) of lower surface of thighs granular; a fold from the eye to the shoulder.

Digits with very small but distinct terminal disks; fingers with a vestigial web; toes about $\frac{1}{3}$ webbed; 1st finger shorter than 2nd; subarticular tubercles large, rounded; metacarpal tubercles distinctly indicated; a large oval inner metatarsal tubercle present; no tarsal fold.

Colouration. Dorsal surface of head, fore limbs and anterior part of body dark brown; posterior part of body and hind limbs pale brown (in life red); throat and chest suffused with dark pigment; belly pale brown with whitish granules; fore limbs obscurely banded; all the digits more distinctly so; no reticulate markings.

Type No. 17401, *Rept. Ind. Mus.*

Habitat. Pattipola near Nuwara Eliya, Central Province, Ceylon; alt. ca. 6000 ft.

This little frog is related to the common S. Indian species *I. glandulosus*, from which it differs in its smaller size, stouter habit, less blunt snout, smooth chest and totally different colouration. It is common under fallen tree-trunks in the jungle round Pattipola and has probably escaped notice hitherto on account of its small size. I collected only a single specimen, although I saw more, in October, 1911.

LACERTILIA.

Fam. GECKONIDAE.

Alsophylax himalayensis, sp. nov.

(Plate xv, fig. 1.)

Habit stout, not at all depressed.

Head strongly convex in lateral view; snout bluntly pointed, about as long as the distance from the eye to the ear; forehead

slightly concave; eyes large; ear-opening elliptical, vertical, about a third as large as the eye.

Limbs short, the hind limb barely reaching the axilla and the fore limb the eye; digits rather stout; their inferior lamellae without projecting tubercles.

Tail stout, tapering, slightly flattened above at the base.

Lepidosis. Snout covered with small, convex, polygonal scales, between two of which, with the rostral and first labial, the nostril is pierced; forehead and vertex with smaller, rounded, feebly keeled granules; 11 upper and 9 lower labials; mental broad, pointed but not produced behind; a single pair of large chin-shields, which form a long suture behind the mental and are followed on each side by a row of smaller enlarged scales that decrease in size from before backwards. Dorsal surface of body covered with granules similar to those on vertex but larger, among which are scattered irregularly still larger but by no means prominent keeled tubercles; tail verticillate, clothed above in imbricating, convex, leaf-shaped scales, some of which project from the surface and are larger than others, below with smaller imbricating scales of similar form; throat covered with small rounded granules, chest and belly with smooth imbricating scales rather larger than the granules on the back; about 27 scales across mid-belly.

Colouration. Dorsal surface pale grey with numerous scriptiform transverse black marks, which are regularly interrupted in the mid-line of the back and take on the tail and digits the form of more or less distinct cross-bars; ventral surface pale, each scale on the belly bearing several microscopic black dots.

Type No. 17195, *Rept. Ind. Mus.*

Habitat. Dharampur, Simla dist., Western Himalayas; alt. ca. 4500 ft. The only specimen (a female) of this very distinct species as yet obtained was found under a stone by one of the Museum collectors.

Gehyra beebei, sp. nov.

(Plate xv, fig. 2.)

Habit stout, depressed; a distinct but not at all web-like fold of skin along each side of the body.

Head ovate, flattened; snout rounded, a little longer than the distance between the eye and the ear; ear-opening nearly circular, about half as large as eye; forehead flat.

Limbs short and flattened, with a distinct fold of skin extending along their posterior margins and in the case of the hind limbs forming a regular web; digits cylindrical at the base and widely expanded distally; digital web absent from fore feet, vestigial on hind feet; subdigital lamellae, with the exception of the terminal lamella, entirely divided by a longitudinal groove and separated at the proximal end of the digital expansion in each case by one or more minute scales; lamellae curved; 8 under

inner and 8 under middle toe ; 6 under inner and 7 under middle finger.

Tail flat, tapering, pointed at the tip, expanded and swollen at the base.

Lepidosis. Snout covered with small convex granules ; nostril surrounded by two larger and flatter scales, with the rostral and the first labial ; granules on forehead and vertex smaller than but similar to those on snout ; 10 upper, 8 lower labials ; two pairs of enlarged chin-shields followed on each side by several smaller scales ; first pair of shields forming a very long suture behind the mental, which is pointed but not produced. Dorsal surface of body and limbs covered with small, almost uniform convex granules, which are replaced on the tail by imbricating scales of about the same size. The whole of the ventral surface of the body covered with small, imbricating, flat scales, which are larger on the belly than elsewhere ; ventral surface of tail with a single series of transverse plates occupying about one third of the breadth.

Colouration of dorsal surface dull pinkish grey with numerous small paler dark-edged ocelli scattered on the back ; ventral surface suffused with black pigment, which becomes intense on the digital lamellae and on some of the scales and transverse plates below the tail.

Type No. 17402, *Rept. Ind. Mus.*

Habitat. Kapit, Sarawak, Borneo.

A single female specimen was taken by Mr. R. Hodgart, zoological collector in the Indian Museum, who accompanied Mr. C. W. Beebe on his ornithological expedition to Borneo in 1910. The species is related to *G. butleri*, Blgr., from the Malay Peninsula. It is distinguished by having all but the terminal subdigital lamellae completely divided, as well as by other characters.

